# ABSTRACT

In a processor-based system, a number of data values are stored in a hardware queue. Each data value is associated with a corresponding one of a number of resources.

5 Presence of a given one of the data values in the hardware queue indicates availability of its corresponding resource to a requesting object. The given data value from the hardware queue is used to access the corresponding resource. Reading a data value from the hardware queue removes the data value from the hardware queue, and therefore a particular resource is removed from a "pool" of resources and is allocated to a requesting object in the processor-based system.

10 Other objects in the processor-based system can no longer access this particular resource. Similarly, writing a data value to the hardware queue adds the data value to the hardware queue, and therefore a particular resource is added to the pool of resources and is recovered because all objects in the processor-based system can again access the particular resource (e.g., by accessing the hardware queue and retrieving the data value corresponding to the particular resource).